AMENDMENTS TO THE CLAIMS

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1. (Original): A compound having the formula:

$$R^{1}$$

$$R^{5}$$

$$R^{4}$$

$$(I)$$

or a pharmaceutically acceptable salt thereof,

wherein:

each occurrence of Y is independently $-CH_2$ - or -C(O)-;

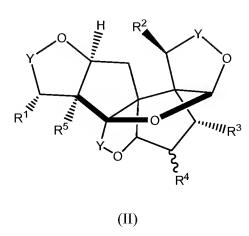
R¹ and R³ are each independently –H or -C₁-C₆ alkyl;

 $R^2 \ is \ -H, \ -OH, \ -O-C_1-C_5 \ alkyl, \ -O-C_2-C_5 \ alkenyl, \ -O-C_2-C_5 \ alkynyl, \ -O-C(O)-C_1-C_5 \ alkyl, \ -O-C(O)-aryl, \ -O-CO-NH-C_1-C_5 \ alkyl, \ -O-SO_2-C_1-C_5 \ alkyl, \ or \ -O-SO_2-aryl;$

 $R^4 \ is \ -C_1-C_5 \ alkyl, \ -NH_2, \ -halo, \ -C_2-C_5 \ alkenyl, \ -C_2-C_5 \ alkynyl, \ -O-C_1-C_5 \ alkyl, \ -O-C_2-C_5 \ alkynyl, \ -O-C(O)-aryl, \ -O-CO-NH-C_1-C_5 \ alkyl, \ -O-SO_2-C_1-C_5 \ alkyl, \ or \ -O-SO_2-aryl; \ and$

R⁵ is -H or -OH.

2. (Original): A composition consisting essentially of two or more structurally distinct compounds, each having the formula:



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wherein:

each occurrence of Y is independently -CH₂- or -C(O)-;

R¹ and R³ and are each independently –H or –C₁-C₆ alkyl;

 R^1 and R^3 are each independently –H or -C₁-C₆ alkyl;

 $R^2 \text{ is -H, -OH, -O-C}_1\text{-C}_5 \text{ alkyl, -O-C}_2\text{-C}_5 \text{ alkenyl, -O-C}_2\text{-C}_5 \text{ alkynyl, -O-C}(O)\text{-C}_1\text{-C}_5$ $\text{alkyl, -O-C}(O)\text{-aryl, -O-CO-NH-C}_1\text{-C}_5 \text{ alkyl, -O-SO}_2\text{-C}_1\text{-C}_5 \text{ alkyl, or -O-SO}_2\text{-aryl;}$

 $R^4 \text{ is -C}_1\text{-C}_5 \text{ alkyl, -NH}_2, \text{-halo, -C}_2\text{-C}_5 \text{ alkenyl, -C}_2\text{-C}_5 \text{ alkynyl, -O-C}_1\text{-C}_5 \text{ alkyl, -O-C}_2\text{-C}_5 \text{ alkynyl, -O-C}_0\text{-C}_2\text{-C}_5 \text{ alkyl, -O-C}_0\text{-aryl, -O-CO-NH-C}_1\text{-C}_5 \text{ alkyl, -O-C}_0\text{-aryl, and}$ $SO_2\text{-C}_1\text{-C}_5 \text{ alkyl, or -O-SO}_2\text{-aryl; and}$

R⁵ is -H or -OH.

3. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), each occurrence of Y is -CH₂-.

4. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), each occurrence of Y is -C(O)-.

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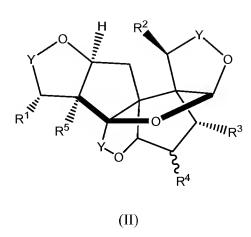
- 5. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R¹ is -C₁-C₆ alkyl.
- 6. (Original): The composition of claim 5, wherein R¹ is methyl.
- 7. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R^3 is $-C_1$ - C_6 alkyl.
- 8. (Original): The composition of claim 7, wherein R³ is *tert*-butyl.
- 9. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R⁴ is -OH.
- 10. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R⁵ is -OH.
- 11. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R² is –OH.

12. (Previously Presented): A composition consisting essentially of a first compound having the formula:

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wherein R_2 is -H, $-C_1-C_5$ alkyl, -OH, $-NH_2$, -halo, $-C_2-C_5$ alkenyl, $-C_2-C_5$ alkynyl, $-O-C_1-C_5$ alkyl, $-O-C_2-C_5$ alkenyl, $-O-C_2-C_5$ alkynyl, $-O-C_3-C_5$ alkyl, $-O-C_3-C_5$ al

and one or more structurally distinct compounds, each having the formula:



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wherein each occurrence of Y is independently -CH₂- or -C(O)-;

R¹ and R³ and are each independently –H or –C₁-C₆ alkyl;

R¹ and R³ are each independently –H or -C₁-C₆ alkyl;

 R^2 is -H, -OH, -O-C₁-C₅ alkyl, -O-C₂-C₅ alkenyl, -O-C₂-C₅ alkynyl, -O-C(O)-C₁-C₅ alkyl, -O-C(O)-aryl, -O-CO-NH-C₁-C₅ alkyl, -O-SO₂-C₁-C₅ alkyl, or -O-SO₂-aryl;

 $R^4 \ is \ -C_1-C_5 \ alkyl, \ -NH_2, \ -halo, \ -C_2-C_5 \ alkenyl, \ -C_2-C_5 \ alkynyl, \ -O-C_1-C_5 \ alkyl, \ -O-C_2-C_5 \ alkynyl, \ -O-C(O)-aryl, \ -O-CO-NH-C_1-C_5 \ alkyl, \ -O-SO_2-C_1-C_5 \ alkyl, \ or \ -O-SO_2-aryl; \ and$

R⁵ is -H or -OH.

13. (Canceled).

14. (Previously Presented): The composition of claim 12, wherein the first compound is a compound having the formula:

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15. (Previously Presented): The composition of claim 12, wherein the first compound is a compound having the formula:

16-17. (Canceled)

18. (Previously Presented): A composition consisting essentially of Ginkgolide A and Ginkgolide J.

19. (Previously Presented): A composition consisting essentially of (i) an antioxidant, a pharmaceutical carrier, or a combination thereof and (ii) two or more structurally distinct compounds, each having the formula:

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$$R^{1}$$

$$R^{5}$$

$$R^{5}$$

$$R^{4}$$
(II)

wherein:

each occurrence of Y is independently -CH₂- or -C(O)-;

R¹ and R³ and are each independently –H or –C₁-C₆ alkyl;

R¹ and R³ are each independently –H or -C₁-C₆ alkyl;

 $R^2 \text{ is -H, -OH, -O-C}_1\text{-C}_5 \text{ alkyl, -O-C}_2\text{-C}_5 \text{ alkenyl, -O-C}_2\text{-C}_5 \text{ alkynyl, -O-C}(O)\text{-C}_1\text{-C}_5$ alkyl, -O-C(O)-aryl, -O-CO-NH-C $_1$ -C $_5$ alkyl, -O-SO $_2$ -C $_1$ -C $_5$ alkyl, or -O-SO $_2$ -aryl;

 $R^4 \text{ is -C}_1\text{-C}_5 \text{ alkyl, -NH}_2, \text{-halo, -C}_2\text{-C}_5 \text{ alkenyl, -C}_2\text{-C}_5 \text{ alkynyl, -O-C}_1\text{-C}_5 \text{ alkyl, -O-C}_2\text{-C}_5$ alkenyl, -O-C $_2$ -C $_5$ alkynyl, -O-C $_3$ -C $_5$ alkyl, -O-C $_5$ alkyl, -O-C $_5$ alkyl, -O-C $_5$ alkyl, -O-C $_5$ alkyl, or -O-SO $_2$ -aryl; and

R⁵ is -H or -OH.

20. (Original): The composition of claim 19, wherein the antioxidant is vitamin C, vitamin E, N-acetyl-L-cysteine, resveratrol, coenzyme Q, alpha-lipoic acid, lycopene, or any combination thereof.

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- 21. (Previously Presented): The composition of claim 19, wherein the antioxidant is a biflavone.
- 22. (Original): The composition of claim 21, wherein the biflavone is amentoflavone, ailobetin, ginkgetin, isoginlgetin, sciadopirysin, or any combination thereof.
- 23. (Previously Presented): The composition of claim 19, wherein the antioxidant is a flavonoid.
- 24. (Original): The composition of claim 23, wherein the flavonoid is a flavonol glycoside.
- 25. (Original): The composition of claim 24, wherein the flavonol glycoside is quercetin, kaempferol, isorhamnetin, or any combination thereof.
- 26-28. (Canceled).

- 29. (Previously Presented): The composition of claim 18, wherein the composition is obtained using a process comprising:
- (i) extracting Ginkgo Biloba plant material with ethyl acetate and filtering the resultant solution to provide a first filtered residue and a first filtrate;
- (ii) diluting the first filtered residue with diethyl ether and filtering the resultant solution to provide a second filtered residue and a second filtrate;
- (iii) diluting the second filtered residue with methanol and filtering the resultant solution to provide a third residue and a third filtrate;
- (iv) concentrating the third filtrate and subjecting the resultant concentrate to chromatography under conditions sufficient to provide a first fraction which comprises a mixture of Ginkgolide A and Ginkgolide B, and a second fraction which comprises a mixture of Ginkgolide C and Ginkgolide J;
- (v) combining the first and second fractions and concentrating the combined first and second fractions to provide a concentrate which comprises Ginkgolide A, Ginkgolide B, Ginkgolide C and Ginkgolide J;
- (vi) diluting the concentrate obtained in step (v) with an organic solvent and contacting the components of the resultant solution with benzyl bromide in the presence of a nonnucleophilic base under conditions sufficient to provide a product mixture which comprises unreacted Ginkgolide A, unreacted Ginkgolide J, benzylated Ginkgolide B and benzylated Ginkgolide C;
- (vii) subjecting the product mixture obtained in step (vii) to chromatography under conditions sufficient to provide a composition comprising Ginkgolide A and Ginkgolide J; and

(viii) purifying the composition obtained in step (vii) to obtain a purified composition consisting essentially of Ginkgolide A and Ginkgolide J.

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30-57. (Canceled).